

The Great Southeast Pollinator Census



Insect Counting & Identification Guide

Thank you for being part of pollinator conservation by helping us document our pollinator populations! Here are your counting instructions.

Counting instructions:

- Choose a favorite pollinator plant for counting. This can be any blooming plant that shows insect activity.
- Count and categorize the insects that land on your plant. Count for 15 minutes. The insect categories are:
 - Bumble Bees
 - Honey Bees
 - Small Bees
 - Carpenter Bees
 - Wasps
 - Flies
 - Butterflies/Moths
 - Other insects
- There is an insect counting sheet at the end of this booklet to make counting easier for you.
- Upload your counts on the website (<https://GSePC.org>). The portal to upload counts will open on the first day of the counts. We do not have the ability to accept mailed paper forms.)
- Post photos of your counters having fun, photos of your gardens, or anything you think would be of interest to the group on the Southeast Pollinator Census Facebook page.
- Becky Griffin is the project coordinator and is available through email at beckygri@uga.edu if you have any questions.
- Counting hint: Your cell phone camera makes a great magnifier.
- The next pages are examples of the insects that you may see. Use these as your guides.

Have questions about counting?
Contact Becky Griffin at beckygri@uga.edu.



Carpenter Bee

Carpenter Bees

(16 – 22 mm)

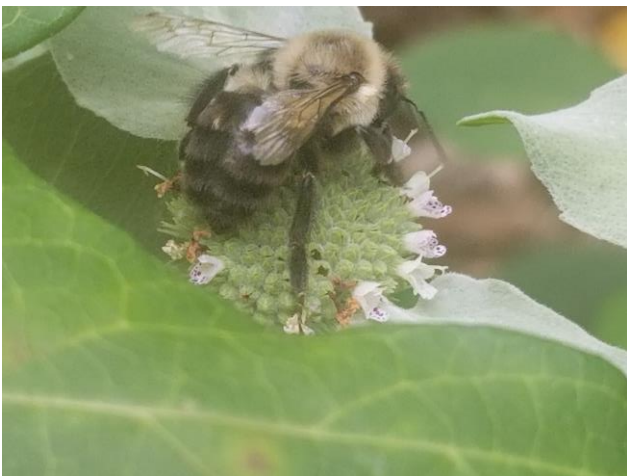
- Black body with yellow and black bands
- Dense hair on head and thorax
- NO HAIR on abdomen
- Broad head, thick body
- Males have yellow to white coloring on face, females all black on face



Carpenter Bee – Hairless Abdomen



Bumble Bee



Bumble Bee – Hairy Abdomen



Carpenter Bee with a Bumble Bee

Photo credit: Bodie Pennisi, UGA Extension

Bumble Bees

(10 – 19 mm)

- Black body covered with dense yellow and black hair
- Fat bee with small head
- Large thorax and abdomen
- Hairy abdomen

This photo illustrates the differences between the carpenter bee and a bumble bee. The carpenter bee is a “mack truck” while the bumble bee is more of a “pickup truck.”



Honey Bee

Honey Bees

(12 – 15 mm)

- Brown or black stripes on body
 - Golden-brown hair covers abdomen
-



Bumble Bee and Honey Bee

This photo shows a honey bee and a bumble bee together. The two are easily distinguishable.



Metallic green bee

Small Bees

(Any bee smaller than a honey bee)

Can include:

- Leafcutter Bees
- Sweat Bees
- And others
- Note: Keep a lookout for the metallic shine of the sweat bees from the family Halictidae. Even though these bees can be small, the metallic color is easy to spot when the sun is shining on them.

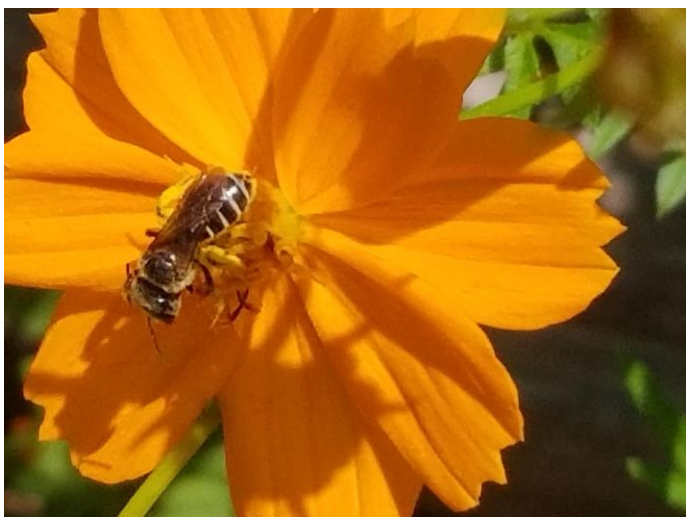


Leafcutter bee

Photo credit: David Cappaert, bugwood.org

Notice the dark striped abdomen of the leafcutter bee below. Remember if you can get a glimpse of the underside of the abdomen, the bee will carry the pollen there on the hairy scopa.





Small bee on cosmos flower



Small bee on aster



Small bee on mountain mint



Potter Wasp



Paper Wasp



Great Black Wasp

Wasps

(13 - 25 mm)

Can include:

- Potter Wasps
 - Paper Wasps
 - And others
-

These are generally hairless.

Many have very thin waists.

No pollen gathering hairs.

Long thin legs, often with spines.



Fly (notice location of eyes and lack of large antenna)



Tachinid Fly
Photo credit: Sturgis McKeever, Georgia Southern University, Bugwood.org



Flower Fly (Bee mimic)

Flies
(6 – 13 mm)
<ul style="list-style-type: none"> Have two wings instead of the four wings on bees and wasps
<ul style="list-style-type: none"> Eyes are large and take up most of the face
<ul style="list-style-type: none"> Small antenna

Note: Some flies are bee mimics. They have bee-like coloring and will visit flowers. The large eyes and small antenna will confirm you see a fly.

Comparing bees with flies

Bees	Flies
<ul style="list-style-type: none"> Have four wings (they hook together as they fly) Have prominent antennae Have two large eyes and three smaller ones in between (ocelli) Carry pollen in pollen baskets (corbicula) or scopa (on bottom of abdomen) Are generally hairy 	<ul style="list-style-type: none"> Have two wings Have smaller antennae Have two prominent eyes Do not carry pollen Are generally not very hairy When not flying the wings are generally spread and not laying across their body.

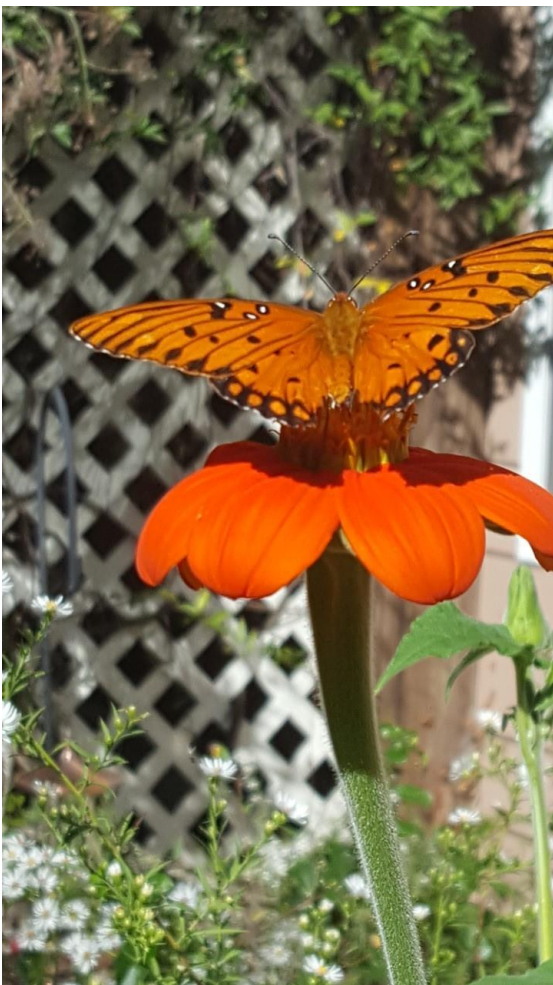


Skipper Butterfly

Butterflies and Moths

Can include:

- Skippers
 - Gulf Fritillaries
 - Monarchs
 - Swallowtails
 - Common Spring Moth
 - And others
-



Gulf Fritillary Butterfly



Monarch Butterfly



Eastern Tiger Swallowtail Butterfly



Lady Beetle

Other Insects

Can include:

- Beetles
 - Dragonflies
 - Lacewings
 - And others
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Dragonfly

Photo credit: Millard Griffin

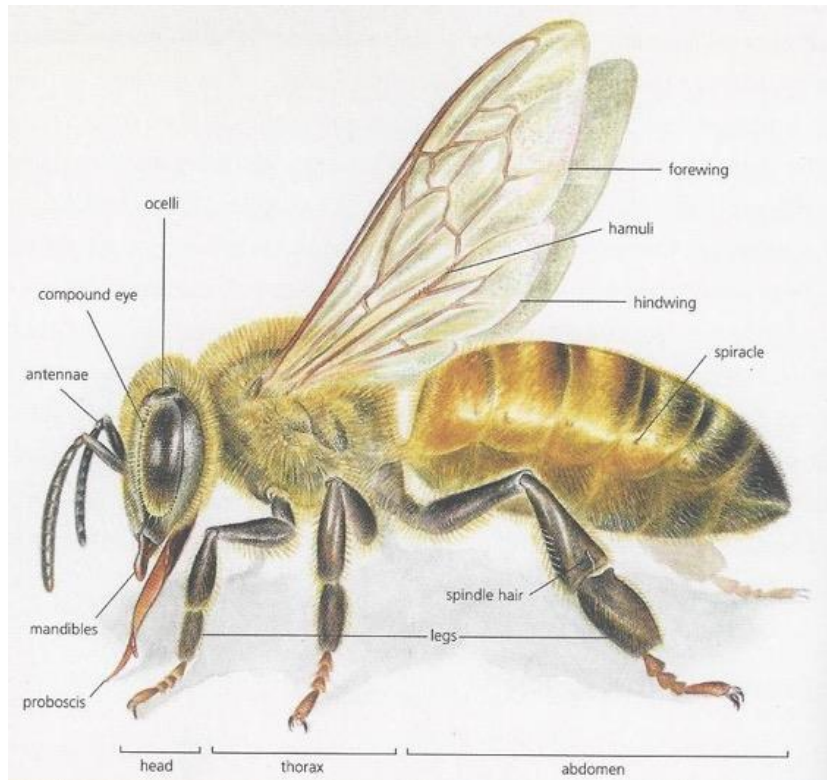


Ambush bug



Great Southeast Pollinator Census Website

You can also use this QR code to get to the website for count uploads!



This program is coordinated by University of Georgia Extension. South Carolina participation is coordinated by Clemson University Extension and North Carolina participation is coordinated by North Carolina A&T State University.



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